Patent claims

1.   A method for computer-supported speech recognition using feature vectors, a detection rate information being stored, said detection rate information indicating for the feature vectors as function of the information content of the feature vector components, which speech recognition rate can be respectively achieved with the feature vectors with the feature vector components which are respectively taken into account,

in which the speech recognition rate which is required for a speech recognition application is determined,

in which using the recognition rate information, the information content of the feature vector components which is at least necessary to ensure the specific speech recognition rate is determined,

in which the number of feature vector components which are necessary in the speech recognition system for the speech recognition application in order to make available the determined information content is determined,

in which the speech recognition is carried out using feature vectors with the number of feature vector components which are necessary to make available the determined information content.

2.   The method as claimed in claim 1, in which a speaker-independent speech recognition method is used for the speech recognition.

3.   The method as claimed in claim 2, in which the speech recognition is carried out using Hidden Markov Models.

4.   The method as claimed in one of claims 1 to 3, in which the feature vector components with the largest information content are selected and used within the scope of the speech recognition.

5.   A speech recognition system having

    a speech recognition unit,

    an electronic dictionary which is connected to the speech recognition unit and in which the words which are taken into account in the framework of the speech recognition are stored,

    a recognition rate information store in which recognition rate information is stored, said information indicating for the feature vectors, as a function of the information content of the feature vector components, which speech recognition rate can be respectively achieved with the feature vectors with the feature vector components which are respectively taken into account,

    a recognition rate information-determining unit for determining the recognition rate information,

    an information content-determining unit for determining the information content for feature vector components of a feature vector in the speech recognition system,

    a feature vector component selection unit for selecting feature vector components which are to be taken into account within the framework of the speech recognition.

6.   The speech recognition system as claimed in claim 5, in which the speech recognition unit is designed for speaker-independent speech recognition.

7.   The speech recognition system as claimed in claims 5 or 6, designed as an embedded system.

8.   A control device for controlling a technical system having a speech recognition system as claimed in one of claims 5 to 7, the control instructions which are provided for controlling the technical system being stored in the electronic dictionary.

9.   A telecommunications device having a control unit as claimed in claim 8.